## December 1, 2003

Hazardous, Toxic and Radioactive Waste Center of Expertise

Ms. Donna J. McCarthy STL Chicago 2417 Bond Street University Park, IL 60466-3182

## Dear Ms. McCarthy:

This correspondence addresses the recent evaluation of STL Chicago of University Park, IL by the U.S. Army Corps of Engineers (USACE) for chemical analysis in support of the USACE Hazardous, Toxic and Radioactive Waste Program.

Your laboratory is now validated for the parameters listed below:

| $METHOD^{(1)}$    | PARAMETER                 | $MATRIX^{(1)}$        |
|-------------------|---------------------------|-----------------------|
| 300.0             | Anions <sup>(6)</sup>     | Water <sup>(3)</sup>  |
| 300.0             | Anions <sup>(6)</sup>     | Solids <sup>(4)</sup> |
| 9010B/9014        | Cyanide                   | Water <sup>(3)</sup>  |
| 9010B/9014        | Cyanide                   | Solids <sup>(3)</sup> |
| 8330              | Explosives                | Water <sup>(4)</sup>  |
| 8330              | Explosives                | Solids <sup>(3)</sup> |
| 8151A             | Herbicides                | Water <sup>(3)</sup>  |
| 8151A             | Herbicides                | Solids <sup>(3)</sup> |
| 7196A             | Hexavalent Chromium       | Water <sup>(3)</sup>  |
| 3060A/7196A       | Hexavalent Chromium       | Solids <sup>(3)</sup> |
| 1664A             | Oil & Grease              | Water <sup>(3)</sup>  |
| 9071B             | Oil & Grease              | Solids <sup>(4)</sup> |
| 3510C/3520C/8081A | Organochlorine Pesticides | Water <sup>(3)</sup>  |
| 3541/3550B/8081A  | Organochlorine Pesticides | Solids <sup>(3)</sup> |
| 9065/9066         | Phenolics                 | Water <sup>(3)</sup>  |
| 9065/9066         | Phenolics                 | Solids <sup>(4)</sup> |
| 3510C/3520C/8082  | Polychlorinated Biphenyls | Water <sup>(3)</sup>  |

| 3541/3550B/8082          | Polychlorinated Biphenyls         | Solids <sup>(3)</sup> |
|--------------------------|-----------------------------------|-----------------------|
| 3510C/3520C/8310         | Polynuclear Aromatic Hydrocarbons | Water <sup>(3)</sup>  |
| 3541/3550B/8310          | Polynuclear Aromatic Hydrocarbons | Solids <sup>(3)</sup> |
| 3510C/3520C/8270C        | Semivolatile Organics             | Water <sup>(3)</sup>  |
| 3541/3550B/8270C         | Semivolatile Organics             | Solids <sup>(3)</sup> |
| 3510C/3520C/8270C SIM    | Semivolatile Organics and         | Water <sup>(7)</sup>  |
|                          | Polychlorinated Naphthalenes      |                       |
| 3541/3550B/8270C SIM     | Semivolatile Organics and         | Solids <sup>(7)</sup> |
|                          | Polychlorinated Naphthalenes      |                       |
| 3005A/3010A/6010B/       | TAL Metals <sup>(5)</sup>         | Water <sup>(3)</sup>  |
| 3020A/7000A Series       |                                   |                       |
| 3050B/6010B/7000A Series | TAL Metals <sup>(5)</sup>         | Solids <sup>(3)</sup> |
| 9060                     | Total Organic Carbon              | Water <sup>(3)</sup>  |
| 9060M                    | Total Organic Carbon              | Solids <sup>(4)</sup> |
| 3510C/3520C/Mod 8015B    | TPH - DRO                         | Water <sup>(3)</sup>  |
| 3541/3550B/Mod 8015B     | TPH - DRO                         | Solids <sup>(3)</sup> |
| 5030B/5035/Mod 8015B     | TPH - GRO                         | Water <sup>(3)</sup>  |
| 5035/Mod 8015B           | TPH - GRO                         | Solids <sup>(3)</sup> |
| 5030B/5035/8260B         | Volatile Organics                 | Water <sup>(3)</sup>  |
| 5035/8260B               | Volatile Organics                 | Solids <sup>(3)</sup> |

Remarks:

- 1) Sample preparation methods have been added to reflect program policy change.
- 2) "Solids" includes soils, sediments, and solid waste.
- 3) The laboratory has successfully analyzed a Proficiency Testing (PT) sample for this method/matrix.
- 4) Approval is based on review of SOPs, performance data, and PT results of other matrices.
- 5) TAL Metals: Aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc.
- 6) Anions: Chloride, fluoride, sulfate, nitrate, nitrite, and ortho-phosphate.
- 7) Approval for polychlorinated naphthalene is based on review of SOPs and performance data only.

Enclosed for your information is a copy of the Laboratory Inspection and Evaluation Report. Please see the enclosed Laboratory Inspection and Evaluation Report for unresolved action items.

Based on the successful analysis of the National Environmental Laboratory Accreditation Conference Proficiency Testing samples for the appropriate fields of testing, the results of the laboratory inspection, and your Corrective Action Report, your laboratory will be validated for sample analysis by the methods listed above. The evaluation, which was conducted for your facility, is based substantially on ISO Guide 25 (General Requirements for the Competence of Testing Laboratories) and USACE Engineering Manual (EM) 200-1-3, Appendix I (Shell for Analytical Chemistry Requirements). The period of validation is 24 months and expires on December 1, 2005.

The USACE reserves the right to conduct additional laboratory inspections or to suspend validation status for any or all of the listed parameters if deemed necessary. It should be noted that your laboratory may not subcontract USACE analytical work to any other laboratory location without the approval of this office. This laboratory validation does not guarantee the delivery of any analytical samples from a USACE Contracting Officer Representative.

Any questions or comments can be directed to Chung-Rei Mao at (402) 697-2570. General questions regarding laboratory validation may be directed to the Laboratory Validation Coordinator at (402) 697-2574.

Sincerely,

Marcia C. Davies, Ph.D. Director, USACE Hazardous, Toxic and Radioactive Waste Center of Expertise

Enclosure